

In the Claims

Please amend the claims as follows.

1. (Three Times Amended) A bottle sterilizing system comprising:

a plurality of inverted bottles, each inverted bottle having an interior and exterior surface, a body portion and an opening, said opening having a width smaller than the width of the body portion that prevents introduction of particles from a source located exteriorly of the bottle from impinging directly on at least a portion of the interior surface of each bottle;

C1 a source of a liquid sterilizing agent;

means for introducing said sterilizing agent onto the interior surface of said inverted bottle from a location exterior to said opening in the form of discrete atomized liquid particles by contacting the bottle interior surface with said particles to form at least a thin liquid film thereon, present in sufficient concentration to substantially eliminate microbial contamination on the interior surface of said bottle after being in contact with said liquid film for a sufficient period of time; and

means for substantially removing said sterilizing agent from said bottle interior surface after said bottle is sterilized as desired.

- C2 16. (Three Times Amended) A bottle sterilization process comprising:

providing at least one inverted bottle having an interior and exterior surface, a body portion and an opening, said opening having a width smaller than the width of the body portion that prevents introduction of particles from a source located exteriorly of the bottle from impinging directly on at least a portion of the interior surface of each bottle;

introducing a sterilizing agent in the form of discrete atomized liquid particles from a location exterior to said opening onto the interior bottle surface;

contacting the bottle surface with said particles whereby said particles form a thin liquid film on the entire interior bottle surface;

C2 maintaining the sterilizing agent on the surface of said bottle for a fixed period of time sufficient to reduce to a desired level the amount of active microorganisms on said interior surface; and

removing said sterilizing agent from substantially all the interior and exterior surfaces after said surfaces are sterilized as desired.

29. (Twice Amended) A bottle sterilization apparatus comprising:

C3 at least one inverted bottle having an interior and exterior surface, a body portion and an opening, said opening having a width smaller than the width of the body portion that prevents introduction of particles from a source located exteriorly of the bottle from impinging directly on at least a portion of the interior surface of said bottle;

a conveyor for moving said bottle in an inverted position;

c 3 a source of a liquid sterilizing agent in the form of atomized liquid particles;
at least one nozzle disposed under and exterior to said opening for introducing
said sterilizing agent onto the interior surface of the bottle in the form of discrete
atomized liquid particles by contacting the bottle interior surface with said particles to
form at least a thin liquid film thereon, present in sufficient concentration to substantially
eliminate microbial contamination on the surfaces of said bottle in contact with said
liquid film; and

a rinsing device for substantially removing said sterilizing agent from said bottle
surfaces after said bottle is sterilized as desired.
